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ABSTRACT

Citations to 73 journal articles and 37 documents, pamphlets, and monographs comprise this annotated bibliography on the subject of Area Health Education Centers (AHECs). The topics covered by these items include the general nature, purposes, and functions of AHECs; discussions and descriptions of specific AHEC programs; AHECs and medical education; nursing and AHECs; libraries and learning resources within AHECs; AHECs and pharmacies; the allied health professions, continuing education, and the role of AHECs; health careers in AHECs; dentistry and AHECs; and health education in the community setting. A list of indirectories and reference tools relevant to Area health Education is also provided. (JI)

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AREA HEALTH EDUCATION CENTERS (AHECs)

AN ANNOTATED LIST OF ARTICLES, DOCUMENTS AND MONOGRAPHS 1971-1981

Compiled by:

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With the assistance of:

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May 1981

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AREA HEALTH EDUCATION CENTERS (AHECs)

An Annotated List of Articles, Documents and Monographs 1971 - 1981

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May 1981

This annotated bibliography was prepared during June 1980 and May 1981. In addition to manual searching, the following databases were searched to retrieve articles and documents on Area Health Education Centers (AHECs).

AIM/ARM (Center for vocation-and-technical-education)
CATLINE
CONFERENCE PAPERS INDEX
ERIC (National Institute of Education
ECER (Exceptional Child Education Resources)
EXCERPTA MEDICA
GOP MONTHLY CATALOG
HEALTH
INTERNATIONAL PHARMACEUTICAL ABSTRACTS
LIST (Library and Information Science Abstracts)
MAGAZINE INDEX
MEDLINE and BACKFILES
MEDOC
AGRICOLA/CAIN (National Agricultural Library)
NATIONAL CLEARINGHOUSE FOR MENTAL HEALTH
NTIS (National Technical Information Service)
PHARMACEUTICAL NEWS INDEX
PRE-MED
SCISEARCH (Science Citation Index, Current Contents)
SOCIOLOGICAL ABSTRACTS
SSCI (Social Sciences Citation Index)

SUMMARY: Seventy-three relevant articles were obtained, read and annotated. Thirty-seven different journals were used as vehicles for publication. This included journals in a variety of disciplines: one dental journal, four pharmacy, four nursing, two public health, and two allied health journals, as well as five hospital journals and three library or communications journals. It is interesting to note that only one article was published in the Journal of the American Medical Association, while twelve articles were published in eight state or regional medical journals. Probably very appropriately, seven articles were published in the Journal of Medical Education.

The thirty-seven documents, pamphlets and monographs listed in the second part of the bibliography represent a limited number of those published over the past ten or so years relating to AHEC programs and activities. They were retrieved primarily by searching ERIC, NTIS, and CATLINE databases. The inclusion of these items in these databases depends largely on whether they are submitted by the authors to the collecting agencies--and many probably were not. AHECs should be encouraged to submit their reports and publications if the results of this type of search are to represent an accurate picture of AHEC activities throughout the country.

I. ARTICLES

GENERAL

Ten articles were retrieved which discuss AHECs in a general way, rather than describing a specific program or project. They were published between 1971-1981.

Several articles outline the pros and cons of AHECs. McGinnis presents a brief editorial, while DeVries compares AHECs with other multi-institutional arrangements. Swanson argues for the expansion of AHECs from centers to systems. Feldman explains how AHECs can ease the problems of staff retention and financial self-sufficiency in health care centers.

Some assistance is offered by two authors. Sherfkin offers advice to new AHEC directors, and Cannon illustrates how MBO techniques can be used in managing federal contracts.

Two authors raise important questions. Miike (1975) calls for a re-examination of the assumptions and predictions of the Carnegie Commission report, and an assessment of the AHEC concept, while Lindes (1978) questions the AHEC influence in attracting physicians to rural areas.

Two important articles (Gessert and Zwick) are published in Public Health Reports by staff of the Health Resources Administration. The Zwick article (1977), is a lengthy report on the first five years of the program, while the Gessert article (1981), somewhat briefer, reviews the past decade and looks at the AHECs in the future.

Cannon, J.A., "Using MBO in Managing Contracts" Health Care Manage Rev 3(1):41-51, Winter 1978. (The Associate Director of the University of Illinois AHEC Project describes how results-oriented management can be successfully adapted to a health care environment, no matter what the size of the contract.)

DeVries, R.A., "Health Care Delivery: Strength in Numbers" Hosp 52(6):81-84 March 16, 1978. (The Program Director of the W.K. Kellogg Foundation sets forth the pros and cons of seven types of multi-institutional arrangements, including AHECs.)

Feldman, R.,Dietz, D.M.; and Brooks, E.F., "The Financial Viability of Rural Primary Health Care Centers", Am J Public Health 68(10): 981-7, Oct 1978. (Examines reasons primary health care centers become either "self sufficient" or shut down for lack of funds. Maintains that a state AHEC can ease the problem of staff reduction.)

Gessert, C.E. and Smith, D.R., "The National AHEC Program: Review of its Progress and Considerations for the 1980's" Publ Health Rep 96(2): 116-120, Mar-Apr 1981. (Includes a description and history of the program, and outlines its accomplishments. Concludes that it "has been a successful catalyst for forming educational linkages between health sciences centers and communities".)

SPECIFIC

Twenty-two articles were retrieved describing AHEC or AHEC-like programs in eleven states: Arkansas, California, Illinois, Minnesota, Nebraska, North Carolina, Pennsylvania, Tennessee, Texas, Washington and West Virginia. These were published between 1973 and 1980.

Several are merely brief outlines or progress reports, most include descriptions of the structure, objectives, functions, program elements and activities of the AHECs. There is an emphasis on how the AHECs are creating linkages among medical schools, communities, hospitals, and other educational institutions (Leyasmeyer and Lewis) and on how they are meeting the needs of a shortage and maldistribution of health manpower (Bruhn, Goronsky, and Watts). One presents a model or prototype (McLeod), and one discusses program evaluation (Rosinksi).

(Anonymous), "North Carolina Committed to Decentralized Medical Education, "Commitment 3(2):9, Spring 1978. (Briefly outlines the historical development of decentralized medical education in the state, the establishment of the AHEC network and the financial support from federal and state sources.)

(Anonymous), "South and Central Texas Residents Affected by AHEC," Commitment 3(2):15 Spring 1978. (Briefly describes AHEC educational programs for allied health, medical, dental and nursing students which include initial training, preceptorship and continuing education.

Bost, R.B. and Woodworth, P., "The University of Arkansas for Medical Sciences Area Health Education Centers Program," J Ark Med Soc 77(2):101-105, July 1980. (Describes the aims, purposes, teaching resources and programs of a state funded AHEC, consisting of six educational centers.)

Bruhn, J.G., "Health Manpower Needs Among Mexican-Americans in Texas" Tex Rep Biol Med 32(3 & 4): 633-647, 1974. (Examines the shortage and maldistribution of health personnel in Texas and presents the AHEC as a positive program to solve the manpower needs.)

Fordham, C.C., "North Carolina's Regional Program Revisited" Hosp Pract 13(9):11, Sept 1978. (An editorial which presents a brief six-year progress report of the North Carolina AHEC.)

George, J.H., "Consortium Serves Nebraska Hospitals' Educational Needs", Cross-Reference 7(6):1-3, Nov/Dec 1977. (Describes the goals and programs of the Area Health Education Consortium for Southwest Nebraska, which was implemented by the Veterans Administration.)

SPECIFIC (cont'd)

Goronzy, D.W., "Area Health Education Center Eases Manpower Maldistribution", Hosp 50(6):109-110+, March 16, 1976. (Describes the Southeast Tennessee AHEC, which helps through local centers to reduce the burden of training health personnel and ease the maldistribution problem.)

Goronzy, D.W., "Area Health Education Center: A Model of a Consortium Approach to Health Manpower Education and Consumer Education in Southeast Tennessee" J Tenn Med Assoc 68(11): 883-886, Nov 1975. (Describes the organization of the AHEC, its goals and objectives, its activities in continuing education and consumer education, and its benefits to Southeast Tennessee's small hospitals.)

Holliday, J.L.; Fox, C.E,; and Siegel, E., "Child Health, Rural North Carolina and Chapel Hill: AHEC in Columbus County" NC Med J 37(11):601-4, Nov 1976. (Describes efforts to provide child health care assistance through the AHEC and the University of North Carolina School of Public Health.)

Holliday, J.L.; Fox, C.E.; and Siegel, E., "AHEC in Columbus County" NC Med J 38(3):156, 1977. (A letter to the editor clarifying the North Carolina AHECs role with regard to the provision of direct health services.)

Lewis, H.L., "Hospitals as Classrooms", Mod Health Care 2:57-61, Oct 1974. (Explains how AHECs in 11 states are providing a new link between communities and hospitals, and uses the West Virginia AHEC as a case in point. Includes a map of the U.S. showing AHEC distribution and coverage with a brief description of each Center.)

Leyasmeyer, E.D., "The Area Health Education Center as a Rural Health Care Provider" Hosp 50(21):107-8+, Nov 1, 1976. (Describes the University of Minnesota AHEC as it links the medical center to a community consortium of hospitals, colleges, vocational schools, school districts and health practitioners.)

McCleary, E.H., "How They're Seeding the Valley" Am Med News 21(3) Suppl. 3-4, 12, March 27, 1978. (Describes efforts in California's San Joaquin Valley to meet the physician shortage, by providing various AHEC educational programs.)

McLeod, M.W., "The Regional Health Education Center: Illinois AHEC as an Organizational Prototype" J Med Educ 54(4):300-307, April 1979. (Describes the concept of a regionalized system (AHES) rather than a decentralized center(AHEC) and presents a conceptual model based on the Illinois experience for a regional health education center.)

SPECIFIC(cont'd.)

Rosinski, E.F., "The Central San Joaquin Valley Area Health Education Center" West J Med 128:355-359, April 1978. (Describes the structure, goals, objectives and activities of the CSJV AHEC in California. Includes a discussion of some specific results of the evaluation component of the program.)

Royce, P.C., "Structure & Function of a Rural Area Health Education Center (Species Carnegie)" Guthrie Bull 44:13-18, Summer 1974. (Presents arguments to show that the Guthrie Clinic Ltd. and the Robert Packer Hospital of Sayre, Pennsylvania together constitute an "Area Health Education Center" as proposed by the Carnegie Commission.)

Saltzman, B.N., "The Arkansas Model: Statewide Cooperation" J Ark Med Soc 77(2):93-97, July 1980. (The author describes the rural health movement in Arkansas which involves financial aid to medical students, an "Opportunity Fair" for rural towns to publicize their physician needs, the development of AHEC centers, and the establishment of an Office of Community Medical Affairs and a Rural Medical Development Program at the University.)

Schottstaedt, W.W.,; Brandt, E.N,; and Brunn, J.G., "Improving the Delivery of Health Services in South Texas" Tex Med 74(10):52-55 Oct 1978. (Describes the AHEC-University of Texas program and its attempts to improve health care delivery, and increase the participation of Mexican-Americans in health careers.)

Uhl, H.S.M. "In Carolina, Teaching Centers Link Atlantic to Appalachians" Hosp Prac 9(9):169+, Sept 1974. (Describes the goals, the structure, and the various programs of the North Carolina AHECs which tie community hospitals to the University.)

Ward, H., "Entering the Eighties, University of Arkansas for Medical Sciences Campus Progress Report" J Ark Med Soc 76(8):309-311, Jan 1980. (Describes UAMSC clinical, rural, and research programs already initiated or to begin in 1980. Briefly outlines AHEC activities under rural health.)

Watts, M.S.M., "Of WAMI's and AHECs" West J Med 130(4): 365, April 1979. (Editorial which touches on how the programs of the University of Washington School of Medicine for Washington, Alaska, Montana and Idaho and the Central San Joaquin Valley AHEC in California attempt to solve the problem of maldistribution of health manpower.)

White, C.H., "A Comparative Analysis of Area Health Education Centers and Health Services Educational Activities" J Allied Health 2(4): 173-179, Fall 1973. (Compares RMPS and Bureau of Health Manpower AHECs and includes a brief description of the program elements of California RMPs.)

MEDICAL EDUCATION

Although many of the foregoing general and specific articles relate to medical education, these four articles (1971-1980) address it in particular. They address it in various ways. One article (Berens) presents the role of hospitals as well as the responsibilities of students in a teaching setting. The other three examine the impact of AHECs on medical schools and medical education, and in turn, on medical school administrators and faculties.

Berens, L. and Nicholson, R.M., "A Model for Statement of Privileges of Medical Students within the AHEC Systems" J Med Educ 55(1):23-26, Jan 1980. (Presents a model of privileges and responsibilities for medical students in hospitals, as well as the responsibilities of hospital personnel to define their roles in medical education. Written by physicians at the Southwestern Michigan AHEC.)

Gordon, M.S., "Health Education Centers - Their Role in Medical Education" J Am Med Assoc 218(8):1192-1194, Nov 22, 1971. (Explains the Carnegie Commission's AHEC concept, and how AHECs could help overcome maldistribution of physicians and remove the pressure to develop more medical schools.)

Schwarz, M.R.,"Area Health Education Centers--'A Holy Alliance' for Medical Education" Hosp Med Staff 2:28-35, Feb 1974. (The director of the WAMI /Washington, Alaska, Montana, Idaho/ program describes the alliance between medical education and health care delivery through an AHEC. He outlines the problems medical education faces, and the benefits an AHEC concpet can provide to meet them.)

Uhl, H.S., "Reorienting Medical Education: A Reappraisal" Hosp Pract 9(9):11-12, Sept 1974. (In a brief editorial, the director of the AHEC in Asheville, North Carolina, argues that in order for the AHEC concept to succeed, there must be a reorientation of medical school administrators and faculties.)

NURSING

Eleven articles (1973-1980) describe AHEC nursing activities in five states: California, North and South Carolina, Ohio and Texas. All but one are published in nursing journals.

The articles cover a wide range of topics, with the greatest emphasis on continuing education. Three articles (Smith, Barlow and McGrath) outline needs assessment projects, while others include descriptions of various programs such as internships preceptorships, inservice education, baccalaureate training, etc. One describes a program for nursing aides(Chatham) and another describes a recreational program for patients in a nursing home (Cozart). Several include evaluation components (Barlow, Chatham, McGrath & Weiss.)

Baird, J.H., "Regional Planning for Health Manpower: AHECs and Community-Based Programs" J Contin Educ Nurs 4(1):5-11, Jan/Feb 1973. (Describes the AHEC concept and compares it to the development of the Mahoning Shenango Area Health Education Network, (MSAHEN)which was funded by the Northeast Ohio Regional Medical Program. Briefly outlines how it has attempted to meet nursing needs in the area through formal training, short term programs and inservice education.)

Barlow, D.J. and Chesney, A.P., "Nurses Want to Keep Up to Date!" J Contin Educ Nurs 8(6):15-21, Nov/Dec 1977. (Describes continuing education programs for nurses in the Texas AHEC and how needs were determined and how programs were evaluated.)

Chatham, M.A., "A Continuing Education Program for Nursing Aides: Communication Skills, Self Concept, and Problem Solving" J Contin Educ Nurs 9(5): 26-29, Sept/Oct 1978. (Describes a two-day workshop for nursing aides at the Northwest AHEC, Bowman Gray School of Medicine in North Carolina, designed to fill a need in continuing education.)

Cozart, E.S. and Evashwick, C., "Developing a Recreational Program for Patients in a Rural Nursing Home" Public Health Rep 93(4): 369-374, July/Aug 1978. (Describes how the North Carolina AHEC assisted a rural nursing home meet Medicare regulations by providing a recreation therapist who developed approved patient activities.)

Lawler, T., "The Support of Hospital Inservice Programming: An AHEC Priority" J Contin Educ Nurs 9(4):3-7, July/Aug 1978. (Describes how the North Carolina's Eastern AHEC offered technical assistance in initiating and improving staff development programs for nurses in hospitals in the region.)

NURSING (cont'd.)

McGill, C. and Barlow, D., "Implementing a Regional Plan for Continuing Education in Nursing" J Contin Educ Nurs 7(5): 30-38, Sept/Oct 1976. (Describes the initial phase of a multi-institutional regional network for continuing education of nurses, which was supported by the University of Texas AHEC.)

McGrath, B.J., "Nursing in Area Health Education Centers" Am J Nurs 76(10):1605-1607 Oct 1976. (Describes how North Carolina's nine AHECs are organized to enable nurses to pool resources and provide programs in rural areas which include preceptorships as well as refresher courses.)

McGrath, B.J. and Bacon, T.J., "Baccalaureate Nursing Education for the R.N.: Why is it so scarce?" J Nurs Educ 18(6):40-45 June 1979. (Discusses the interest in baccalaureate training and the lack of its availability. Reports on a survey of nurses' needs in rural North Carolina, and proposes a program to address their needs. The authors are affiliated with North Carolina AHECs.)

McGrath, B.J. and Koewing, J.R., "A Clinical Preceptorship for New Graduate Nurses" J Nurs Admin 8(3):12-18, March 1978. (Describes a clinical preceptorship involving the North Carolina AHEC, a community hospital and community college. Its purpose is to smooth the transition from student to nurse. Includes a discussion of the performance of students and evaluation of the program.)

Smith, J.O.; Ross, G.R.; and Smith, I.K., "Statewide Continuing Education Needs Assessment in Nursing: The SNAP System" J Contin Educ Nurs 11(4):40-45, 1980. (This Statewide Needs Assessment Program, sponsored by the South Carolina AHEC, was designed to provide a flexible mechanism for collecting and analyzing large amounts of data by utilizing a computer.)

Weiss, S.J. and Ramsey, E., "An Interagency Internship: A Key to Transitional Adaptation" J Nurs Admin 7(8):36-42, Oct 1977. (Describes a Central San Joaquin Valley AHEC program in California to develop, implement and evaluate an internship for newly graduated nurses in 6 hospitals.)

LIBRARIES/LEARNING RESOURCES

There were nine articles retrieved in this category, published between 1973 and 1978. Two were in the major medical library journal, two in a journal devoted to biomedical communications, one in a state medical society journal and two in a state library journal. They covered AHEC activities in Arkansas, California, North Dakota, and North and South Carolina.

Most articles outline specific programs. The articles by Mangiaracina, Gillikin and Bandy address the problem of evaluation of resources, while the Bandy article stresses the importance of project evaluation as a part of the planning process. The Evans article describes the evaluation strategy actually used in a library program. The West article (now out of date) studied the impact of AHECs on health sciences libraries.

Bandy, C.R.,"Area Health Education Center Libraries and Medical Medical School Libraries, Establishing an Interface" Bull Med Libr Assoc 66(4):426-431, Oct.1978. (Reports on the development of the AHEC libraries in North Dakota. Stresses the importance of advanced planning, needs assessment, evaluation, institutional agreements and publicity.)

Barnhard, N.K.,"The Biomedical Communications Network and Interlibrary Loans in Arkansas," Ark Libr 33:5-10, 1976. (Describes how services are provided through the National Library of Medicine's Biomedical Communications Network, and how AHEC libraries were established to improve document delivery within the network.)

Evans, A.;Mirsky, P.; and Jensen-deVictoria, M., "Evaluation of a Library Program in a Carnegie Model Area Health Education Center" Bull Med Libr Assoc 66(2):190-99, April 1978. (Describes the evaluation strategy of the medical library program component of the Central San Joaquin Valley AHEC in California. It included a rating system for assessing program effectiveness, a system or weights for measuring hospital library development, and a questionnaire survey.)

Gillikin, P.; Parker, C.F.; and Lee, S., "Planning and Management of a Regional Learning Resource Network: The Library Can Do It" J Biocommun 5(3):9-16 Nov. 1978. (Describes the audiovisual network of the North Carolina Northwest AHEC, which covers 16 counties and includes 30 institutions. It is centralized in the Bowman Gray School of Medicine Library.)

Hogan, R., "Arkansas Area Health Education Center Libraries: An Arkansas Network'" Ark Libr 35(3):12-14, Sept. 1978. (Describes the establishment of 6 AHEC libraries and how they support AHEC activities and provide service to all health practitioners in the state.)

Mangiaracina, J. and Sawyer, W.A., "A Statewide Biomedical Communications Network for South Carolina" J Biocommun 3(1): 5-11 March 1976. (The program incorporated a library/learning resource center in each of four AHECs, a method for selecting and evaluating self-instructional materials, and a uniform hardware system for inside and outside of the classroom.)

Sawyer, W.A. and McPhail, M.E., "Extension Library Services for South Carolina Physicians", J SC Med Assoc 69(9): 354-5, Sept. 1973. (Briefly describes an extension program established at the Medical University of South Carolina through a Medical Library Resource Project Grant. In conjunction with the AHEC it provides library services to physicians, supports continuing education programs, and coordinates existing library extension programs.)

Sawyer, W.A. and Mangiaracina, J., "Area Health Education Centers as the Foundation for a Statewide Biomedical Communications Network" Bull Med Libr Assoc 62(4):343-47, Oct. 1974. (Describes the South Carolina AHEC in general and the Library/Learning Center component in particular. Resource centers were established in four AHECs, with uniform hardware systems, and a program for selection and evaluation of self-instructional materials was developed.)

West, R.T. and Howard, F.H., "Area Health Education Centers and Health Science Library Services" Bull Med Libr Assoc 65(3): 368-376 July 1977. (A study by the National Library of Medicine, in conjunction with the Bureau of Health Manpower, to determine how AHECs relate to library and information activities. It shows, although important, library services seldom are included in planning, budgeting, and development.)

PHARMACY

Four articles were retrieved that relate to pharmacy programs, all of which were published in pharmacy journals between 1976 and 1980. They include descriptions of programs in Kentucky, Texas and North Carolina.

Two discuss specific programs, one reports on a questionnaire survey of physicians' usage of pharmacists, and the fourth is a report on a work sampling of pharmacy externs.

Hightower, W.L. and Yanchick, V.A. "Investigation of an Area Health Education Center Pharmacy Training Program" Am J Pharm Educ 43(3):233-235, 1979. (Describes a study of the AHEC Pharmacy Training Program at the University of Texas, Austin, to determine percent of time students spend at various activities and how they relate to program objectives.)

Lesshafft, C.T., Swintosky, J.V, and Vogt, D.D., "Pharmacy Education in an Area Health Education System" Am J Pharm Educ 40(1): 62-64 Feb. 1976. (Discusses a decentralized health education system, established and funded by the State of Kentucky and contrasts an AHES with an AHEC. Describes a pharmacy model where students are rotated through the AHES region.)

Paoloni, C.U., "The North Carolina Area Health Education Center Program: An Overview" Contemp Pharm Pract 3(1):31-36 Winter 1980. (Describes the organizational structure of the North Carolina AHEC and concentrates on the programs of the School of Pharmacy which include residencies and continuing education.)

Shearer, S.W., Gagnon, J.P., and Eckel, F.M., "Community, Hospital and Clinical Pharmacists and Drug Information Centers as Physician Drug Information Sources" Am J Hosp Pharm 35(8):909-914 August 1978. (Describes a study of 674 North Carolina university and community physicians to determine their use of drug information centers and clinical, hospital, and community pharmacists.)

ALLIED HEALTH/CONTINUING EDUCATION

Five articles (1976-1979) address the area of allied health.

One(Philips) is concerned with the migration of health professionals to underserved areas in Texas, while the other four describe regional and interdisciplinary continuing education programs in Illinois and No.Carolina and offer advice on how to plan, design and evaluate them.

Bennett, N., "A Method for Continuing Education Program Development in a Semi-Rural Setting, " J Allied Health 8(1):34-7, Feb. 1979. (Describes a method of interdisciplinary program development for allied health continuing education programs in Illinois which utilizes local practitioners and develops future resources.)

Koewing, J.R., Howes, B.R. and Metz, D., "Four Characteristics for Regional Continuing Education in Medical Allied Health", J Allied Health 5(4):31-40, Fall 1976. (Identifies the problems of providing continuing education to allied health personnel, and the strategy used in University of North Carolina AHECs to resolve them. Four criteria to judge the strategies are multidisciplinary focus, coordinated use of available resources, interdisciplinary experiences, and cost effectiveness.)

Koewing, J.R., Howes, B.R., and Metz, D., "Six Design Factors for Planning and Evaluating Regional Continuing Education" Phys Ther 58(2):168-174 Feb. 1978. (Reports on a study conducted at the North Carolina AHEC. It identifies characteristics essential to the development of regional continuing education programs for allied health and relates them to criteria for design factors in planning and evaluating programs. An actual workshop is used as an illustration.)

McLeod, M.W., "Regional Approach to Health Occupations Education", Commun & Junior College Journal 48(4):30-33 Dec/Jan. 1977-78. (Describes an inter-institutional cooperative project of the University of Illinois AHEC and four community colleges to provide health occupations education, and continuing education.)

Philips, B.U., Mahan, J.M. and Kroshel, F.T., "Migration of Allied Health Care Personnel in and out of an Underserved Area: A Question of Roots" J Allied Health 7(4):288-293 Fall 1978. (A one-year followup survey of graduates of an AHEC program in Texas showed that 85% of the graduates had returned to the area of their previous residency which was underserved, rural, and predominantly of one ethnic group.)

HEALTH CAREERS

Four articles were retrieved, written between 1976 and 1978, describing programs in Texas and Missouri that were designed to motivate disadvantaged students into health careers.

One (Bolster) reports on a sample survey to identify barriers to women, two (Calkins) discusses how to identify, select, motivate and assist potential candidates, while the fourth (Philips) one presents a model for the systematic evolution of such efforts.

Bolster, M.S.; Philips, B.U.; Mahan, J.M.; and O'Donell, A.A., "Barriers to Health Career Aspirations of Young Women in the Lower Rio Grande Valley" J Allied Health 7(2):115-121, Spring 1978 (Describes a study of 75 young women in the Lower Rio Grande Valley of Texas, compared to a group of young men aspiring to health careers. It was felt the barriers women identified could be overcome by AHEC programs of the University of Texas.)

Calkins, E.V.; Johnson, A.; and Mares, K.R., "Identification of Rural-Background Applicants by the Talent Identification Program of WMAHEC", J Med Educ 53 (9):764-5, Sept. 1978. (Report of a program by the Western Missouri AHEC to identify, motivate, and assist disadvantaged high school students, who have potential for careers in the health sciences.)

Calkins, E.V.; Johnson, A.; and Mares, K.R., "Identification of Rural-Background Medical School Applicants by the Talent Identification Program of the Western Missouri Area Health Education Center," Coll and Univ 54(1):58-67, Fall 1978. (Describes a WMAHEC program to identify, motivate, and assist potential medical students from rural counties to apply and enter the School of Medicine.)

Philips, B.U.; Mahan, M.; and Perry, R.R., "A Formative and Summative Evaluation Model for Special Educational Programs" J Med Educ 51(10):836-843 Oct. 1976. (Presents data to illustrate a systematic evaluation model to be used for career exploration and study-skills program developed to recruit minority students into health careers. This is a program of the University of Texas AHEC.)

DENTISTRY

Only two articles were retrieved, 1977 and 1978, in addition to a letter followup on one of them. They described programs in North and South Carolina.

(Anonymous) "Governor Edwards Joins AHEC Education Program" J Am Dent Assoc 95(4):711 Oct. 1977. (Brief announcement of an AHEC "Dental Education Day", sponsored by the South Carolina AHEC, the Medical University of South Carolina, the College of Dental Medicine, and the Richland Memorial Hospital.)

Babington, C., "AHEC, Getting Dental Care to North Carolina's Underserved" Commitment 3(2):6-8, Spring 1978. (Describes the University of North Carolina AHEC program that exposes dental students to opportunities in rural practice through externships and rotation programs.)

Waldrep, A.C., "AHEC Program Participant" J Am Dent Assoc 95(6): 1064, Dec. 1977. (A brief letter, as followup to an October article in the same journal. See "Anonymous" above.)

HEALTH EDUCATION

Only one article was retrieved that related to a community health education program.

Cavazos, R.I., "Gracias por sus Efuerzos pos los Niños" Commitment 3(2): 10-15, Spring 1978. (A description of the Hidalgo Project in rural Texas sponsored by the University of Texas AHEC which involves the Schools of Medicine, Dentistry, Nursing, Pharmacy and Public Health. The town was chosen as a site for demonstrating the practicality of an innovative school/community health education program.)

II. DOCUMENTS AND MONOGRAPHS

The items listed in the documents section are generally longer(ranging from 13 to 232 pages) than the articles previously cited. They usually contain more detailed information, although a number of them are not devoted exclusively to AHECs. Many of them, particularly in the General Section, are informational publications, emanating from the federal government (i.e., Bureau of Health Manpower, Health Resources Administration). Two are proceedings of national AHEC conferences (2, 13), several assess the AHEC project (3,4,12), and several include evaluations of specific programs in medical education (25) nursing (26), pharmacy (27,28), health careers (30), and continuing education (32).

GENERAL

1) AHEC (Area Health Education Centers) Background Papers, Bureau of Health Manpower, 1975, 73 p.

   Background papers on areawide education for health professionals, which include discussions of the advantages and limitations of AHECs, their accomplishments, and the various types in operation.

2) AHEC; The Decentralization and Reorganization of Health Professional Education and Training. Proceedings of the National Conference on the Area Health Education Centers Program held in Asheville, North Carolina on April 25-27, 1975. North Carolina University at Chapel Hill, Bureau of Health Manpower, 1975, 132 p.

   Includes the keynote address, panel and round table discussions, and audience question sessions. Sponsored by the 11 universities holding federal contracts for AHECs. Topics included decentralized or regionalized health education, interdisciplinary programs, AHEC governance, and evaluation.

3) An Assessment of the National Area Health Education Center Program. Report of the Secretary of Health Education and Welfare, Health Resources Administration, Bureau of Health Manpower, 1980.

4) Duggar, Benjamin, et.al., National Area Health Education Center Program: External Assessment Design. Final Report. Bio-Dynamics, Inc., Cambridge, Mass. Department of Health, Education and Welfare, 1973, 91 p.

   Includes a description of the 11 AHECs, and an evaluation of objectives, alternative approaches, operations and methodologies.

GENERAL(cont'd.)

5) Disposition Paper on Area Health Education Centers, Alabama Regional Medical Program, Birmingham, 1972, 55 p.

Defines the concept of an AHEC, and includes guidelines for planning, implementing, and evaluating one.

6) Eleven Area Health Education Centers; The View from the Grass Roots, a report for the Carnegie Council on Policy Studies in Higher Education University of Washington Press, January 1980.

Part of a report published under the title: Area Health Education Centers; the Pioneering Years, 1972-78., by Charles E. Odegaard.

7) Grigorieff, Paul, et.al., Initial Description of the National AHEC Program, Final Report, ABT Associates, Inc., Cambridge, Mass., Health Resources Administration, Office of Planning, Evaluation and Legislation, 1976, 232 p.

A collection of data on the 11 AHECs supported by the Bureau of Health Manpower, with descriptions of their organization and activities. Uses site visit reports to analyze selected characteristics, and discusses implications for further evaluation.

8) Higher Education and the Nation's Health; Policies for Medical and Dental Education, a special report and recommendations by the Carnegie Commision on Higher Education. McGraw-Hill, 1970.

9) Information Concerning Area Health Education Centers. Office of Special Programs, Bureau of Health Manpower Education, June 1972.

10) Initial Description of the National AHEC Program - Executive Summary, Report for June 1974 - June 1976, ABT Associates, Inc., Cambridge, Mass. Health Resources Administration, Office of Planning, Evaluation and Legislation, 1976, 28 p.

Describes the first three years of the 11 AHECS and their 26 training sites, compiled from project documents, and site visits.

11) Manpower, A Change in Course, Annual Report, Fiscal 1978, Bureau of Health Manpower.

12) Odegaard, Charles, E., Area Health Education Centers: The Pioneering Years, 1972-1978. Carnegie Council on Policy Studies in Higher Education, Berkeley, California, 1979, 123 p.

Includes a discussion of the historical development of AHECs, and federal policies, contracts and acts pertaining to them. There is a description of site visits, and an assessment of the programs in relation to the Carnegie Commission report.

GENERAL(cont'd.)

13) Proceedings of the Area Health Education Center National Conference, Bureau of Health Resources Development, 1973, 56 p.

Proceedings of the first National AHEC Conference which was called by the Bureau of Health Manpower Education in order to provide a mechanism for sharing information on activities and experiences. In addition to an overview of the program and an evaluation, it includes information on objectives and structure and individual presentations from the contractors.

14) Sandik, Edward, General Structure of the AHEC Manpower Planning Model, Health Services Education Council, 13 p.

This model is to serve as a planning tool and information base for initial planning of the regional AHECs as well as an operational tool once they are established. Annotated flow charts are presented showing planning and information flow.

15) Smith, Daniel R., AHECs -- A Response to Geographic and Specialty Maldistribution, C.E. Pagan Associates, Inc., Bureau of Health Manpower, 1977, 163 p.

Analyzes the effectiveness of AHECs and includes a detailed discussion of each AHEC with information on organization, administration, educational opportunities, facilities and recruitment.

16) Area Health Education Centers. Bureau of Health Resources Development, Office of Special Programs, May 1973, 48 p.

SPECIFIC AHECS OR STATE PROGRAMS

17) Area Health Education, Center of the Navajo Health Authority to Establish the Navajo Center for Health Professions Education. Navajo Health Authority, Window Rock, Arizona, National Institutes of Health (DHEW), New Mexico University, October 1972, 48 p.

Describes the purpose, goals and organizational structure of the AHEC.

18) A Community Directed Consortium and its Management System for Health Manpower Education and Health Care Delivery, Tuskegee Area Health Education Center, Alabama, March 8, 1973, 32 p.

Describes the nature and function of a consortium of eleven institutions and agencies in two states which was formed in order to serve the health needs of the area.

19) Lee, Edgar, Report to the Ohio Board of Regents of the Study on Expanded Medical Education, Ohio Board of Regents, Committee for Expanded Medical Education, 1972, 116 p.

SPECIFIC AHECS(cont'd.)

A report of a study of some of the manpower characteristics and requirements of Ohio. Also included is a report on AHECs and regionalization of academic medicine.

20) Morgan, Bruce B., et.al., Regression Analysis of Physician Distribution to Identify Areas of Need; Some Preliminary Findings, Missouri University, Kansas City, Western Missouri Area Health Education Center, Health Resources Administration, Bureau of Health Manpower, August 1978, 32 p.

A regression analysis was developed of factors that relate to the variance in physician distribution, and factors that influence the maldistribution of physicians. Based on models for different geographic areas, an appropriate one for the WMAHEC area was utilized.

21) Navajo Health Authority, Board of Commissioners, Annual Report, June 1977. Navajo Health Authority, Window Rock, Arizona, 1977, 44 p.

Highlights the major developments of the Navajo Health Authority during 1976-77. AHEC funds provided the bulk of funding for NHA since its inception in 1972.

22) A Report to the President of the University of Missouri from the Committee on Expanded Health Professions Education, Missouri University, Columbia, 1979, 182 p.

This contains a summary of the Committee findings on expanded health professions education, as well as recommendations. Included is a chapter on AHECs which describes their role in improving the distribution of health professionals.

23) Revised Health Manpower Goals, Objectives and Recommendations. Strategies and Priorities. Arkansas State Health Planning and Development Agency, Little Rock, Health Manpower Planning Project, Public Health Service, 1976, 33 p.

Outlines goals, objectives, recommendations and strategies for health manpower planning in Arkansas--based on deliberations and discussions at the Governor's Conference on Health Manpower Planning in December 1975. High priority is given to increasing health workers, particularly through AHECs.

24) White, Charles H., California Health Services/Educational Activities. Consortium Network, Health Services and Mental Health Administration, published by California Regional Medical Programs, Oakland, 50 p.

Includes descriptions of the 10 consortia that make up the California Health Services/Education Activities (HS/EA) network. The first part of the booklet is comparative analysis of AHECs (funded by the Bureau of Health Manpower Education) and Health Services/Educational Activities, (developed and funded by California Regional Medical Programs Service of the Health Services and Mental Health Administration).

MEDICAL EDUCATION

25) Mares, Kenneth R., et.al., WMAHEC - Supported Electives at the UMKC School of Medicine in 1978-79, Missouri University, Kansas City, Western Missouri Area Health Education Center, Health Resources Administration, Bureau of Health Manpower, September 1979, 39 p.

Evaluation of the electives program at the University of Missouri which provides opportunities for learning in community hospitals, physicians' offices and clinics, the main campus and other health care locations. Both physicians and students were asked to evaluate the programs.

NURSING

26) Rural Critical Care Nurse Training Project--Four Corners Area, November 14, 1975. Four Corners Area Health Education Center, New Mexico, New Mexico Regional Medical Program, Albuquerque, November 14, 1975, 53 p.

An evaluation by many of the participants in a program to train nurses to provide rural critical care.

PHARMACY

27) Levine, Daniel U., Attitudes of Graduating Pharmacy Students and Practicing Pharmacists, Missouri University, Kansas City, Western Missouri Area Health Education Center, Health Resources Administration, Bureau of Health Manpower, June 1979, 42 p.

A measurment and comparison of attitudes of graduating seniors and recent graduates of the School of Pharmacy regarding such areas as practice, preparation, the profession, medication records, relationships with patients and with physicians, etc.

28) Mares, Kenneth R., et.al., 1978 Evaluation of the UMKC School of Pharmacy Externship Program, Missouri University, Kansas City, Western Missouri Area Health Education Center, Health Resources Administration , Bureau of Health Manpower, September 1979, 81 p.

An evaluation by pharmacists and externs of the externship program of the School of Pharmacy at UMKC.

HEALTH CAREERS/ALLIED HEALTH

29) Calkins, F. Virginia, et.al., Identification of Rural - Background Medical School Applicants by the Talent Identification Program of the Western Missouri Area Health Education Center, Missouri University, Kansas City, School of Medicine, Western Missouri Area Health Education Center, Kansas City, August 1977, 17 p.

Describes the success of the TIP program in selecting, motivitating and assisting disadvantaged high school students with potential for health sciences careers.

30) Levine, Daniel U., et. al., Participant Evaluation of the TIP College Readiness Program, Kansas City Association of Trusts and Foundations, MO., Kansas City Public Schools, Kansas, Western Missouri Area Health Education Center, Kansas City, August 1977, 24 p.

Describes results of questionnaires, completed by graduates, on the quality of the College Readiness Program, initiated to encourage disadvantaged talented students to prepare for careers in the health care field.

31) Meyerson, Marion D., et.al., Minority Trainees on Speech Satellite Teams; A Manual of Organization and Instruction, California State University, Fresno, California University, Los Angeles, 1974, 130 p.

Describes a program to encourage minority undergraduate students to major in communication disorder programs. Trainees were paid for part-time work at service centers in underserved areas of California. (Program funded by San Joaquin Valley AHEC in California)

CONTINUING EDUCATION

32) Koewing, J. Robert, et.al., Continuing Education in WMAHEC Year 07: An Evaluation Report, Missouri University, Kansas City, Western Missouri Area Health Education Center, Health Resources Administration, October 1, 1979, 31 p.

Two methods for evaluating continuing education of the WMAHEC are examined--whether WMAHEC provided regionally accessible continuing education and whether WMAHEC catalyzed the development of administrative mechanisms to support continuing education program development.

NUTRITION

33) Nutritional Betterment through Higher Education. Remarks by Statewide Leaders at a Planning Session for a Statewide Conference on Nutrition Education. South Carolina Commission on Higher Education, Columbia, South Carolina Medical University, Charleston, Area Health Education Center, June 1977, 27 p.

Includes the remarks of many leaders in the field of nutrition in the state, as well as a summary of ideas that were presented at an AHEC planning session.

DIRECTORIES, REFERENCE TOOLS

34) Area Health Education Centers: A Directory of Federal, State Local and Private Decentralized Health Professional Education Programs. Health Manpower References. C.E. Pagan Associates, Inc., Baltimore, Maryland, 1976, 48 p.

Lists federal, state, local and private AHECs with decentralized professional health education programs initiated in direct response to the recommendations of the Carnegie Commission Report of Higher Education and the Nation's Health. Includes a brief history of the AHEC concept.

35) Area Health Education Centers, A Directory of Federal, State, Local and Private Decentralized Health Professional Education Programs, Health Manpower References. A Supplement. C.E. Pagan Associates, Inc., Baltimore, Maryland, 1976, 639 p.

A directory of AHEC-type programs throughout the U.S. (federal, state, local and privately funded). There is an overview of the project and description of each program.

36) Williams, Wilbert, The Area Resource File; A Manpower Planning and Research Tool, Health Resources Administration, Bureau of Health Resources Development, 1974, 63 p.

This computer data base file has been used for geographic statistical analysis of health resources in countries throughout the U.S. It contains information on health status, demography, economics, and health manpower, training and health facilities.

37) The Area Resource File. A Manpower Planning and Research Tool. Applied Management Sciences, Silver Springs, Md., Bureau of Health Manpower, Manpower Analysis Branch, 1976 35 p.

This computer-based file was originally designed to determine the location of AHECs. It contains health and socio-economic information on a county basis, and is useful for research, analysis and planning.